

1.  $6.6 \times 10^9 \text{ cm}$
  2.  $3.4 \times 10^{13} \text{ mm}$
  3.  $2.2 \times 10^{18} \text{ } \mu\text{g}$
  4.  $3.7 \times 10^{13} \text{ nmol}$
  5.  $1.6 \times 10^3 \text{ Mmol}$
  6.  $8.94 \times 10^1 \text{ cm}$
  7.  $8.125 \times 10^{-41} \text{ KL}$
  8.  $1.61 \times 10^{-3} \text{ hg}$
  9.  $2.2 \text{ dm}$
  10.  $8.8 \text{ dm}$
- $10^3$   
 $\text{Kmol}$   
 $\text{mol}$   
 $\text{nmol}$   
 $10^{-9}$

(4)  $37 \text{ Kmol} \times \underline{10^3 \text{ mol}} \times \underline{10^9 \text{ nmol}}$

$\begin{matrix} 1 & 3 & 9 \\ \text{Kmol} & & \text{mol} \end{matrix}$

$$3.7 \times 10^1 \times 10^3 \times 10^9 =$$

$$3.7 \times 10^{13} \text{ nmol}$$

$$1 \text{ mL} = 1 \text{ cm}^3 = 1 \text{ g}$$

$$5.2 \times 10^{15} \text{ cm}^2 \text{ (2)} = \text{_____ mm}^2 \text{ (2)}$$

$$5.2 \times 10^{15} \text{ cm}^2 \times \frac{1 \text{ m}^2}{(10^2)^2 \text{ cm}^2} \times \frac{(10^3)^2 \text{ mm}^2}{1 \text{ m}^2}$$

$$5.2 \times 10^{15} \text{ cm}^2 \times \frac{1 \text{ m}^2}{10^4 \text{ cm}^2} \times \frac{10^6 \text{ mm}^2}{1 \text{ m}^2}$$

$$5.2 \times 10^{15} \times \frac{10^6}{10^4} = 5.2 \times 10^{17} \text{ mm}^2$$

Ex 1      730

$$7.3 \times 10^2 \text{ hm} = \underline{\hspace{2cm}} \text{ m}$$

$$7.3 \times 10^2 \cancel{\text{hm}} \times \frac{10^2 \text{ m}}{1 \cancel{\text{hm}}} = 7.3 \times 10^4 \text{ m}$$

Ex 2

$$32 \mu\text{mol} = \underline{\hspace{2cm}} \text{ kmol}$$

$$32 \mu\text{mol} \times \frac{1 \text{ mol}}{10^6 \mu\text{mol}} \times \frac{1 \text{ kmol}}{10^3 \text{ mol}} = \frac{3.2 \times 10^{-8} \text{ kmol}}{10^9}$$

one goes in front of bigger value

$3.2 \times 10^{-8}$